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# (12) United States Patent

# Peterson et al.

# (54) HEAVY DUTY TRANSMISSION ARCHITECTURE

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- (51) **Int. Cl.**  *F16H 3/00* (2006.01) *F16H 3/08* (2006.01)

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#### (57) ABSTRACT

A transmission includes a main shaft having two or more main shaft clutches that couple gears to at least one countershaft, and an automated manual transmission coupled to the main shaft via the at least one countershaft. The automated manual transmission includes a front input shaft coupled directly to a main clutch and having a first clutch coupleable to the at least one countershaft, and a rear input shaft coupled to the front input shaft and having a second clutch coupleable to the at least one countershaft. The automated manual transmission is operable to selectively engage the first clutch and the second clutch.

# 10 Claims, 5 Drawing Sheets

